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(FILE 'HOME' ENTERED AT 10:13:20 ON 08 APR 2004)

FILE 'MEDLINE' ENTERED AT 10:13:29 ON 08 APR 2004

L1	46663	S	CALCIUM CHANNEL?
L2	2549	S	N-TYPE
L3	1869	S	L1 AND L2
L4	0	S	L3 AND NEUROSIS
L5	0	S	L3 AND ASTHMA
L6	0	S	L1 AND NEUROSIS
L7	276	S	L1 AND ASTHMA
L8	3	S	L1 AND POLLAKIURIA
L9	0	S	L1 AND SPINAL ANGIOPATHY
L10	7	S	L1 AND ANGIOPATHY
L11	0	S	L1 AND ENCEPHALOMYELOPATHY
L12	9706	S	CALCIUM ANTAGONIST?
L13	0	S	L12 AND ENCEPHALOMYELOPATHY
L14	0	S	L12 AND NEUROSIS
L15	0	S	L12 AND SPINAL ANGIOPATHY
L16	8	S	L12 AND ANGIOPATHY
L17	8	S	L16 NOT L9

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=> d 1-7 bib abs

L10 ANSWER 1 OF 7 MEDLINE on STN
AN 1998189179 MEDLINE
DN PubMed ID: 9514824
TI Characteristics of the in vitro vasoactivity of beta-amyloid peptides.
AU Crawford F; Suo Z; Fang C; Mullan M
CS Roskamp Laboratory, Department of Psychiatry, University of South Florida, Tampa 33613, USA.. fcrawfor@com1.med.usf.edu
SO Experimental neurology, (1998 Mar) 150 (1) 159-68.
Journal code: 0370712. ISSN: 0014-4886.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199804
ED Entered STN: 19980422
Last Updated on STN: 20000303
Entered Medline: 19980414
AB The beta-amyloid (A beta 1-40) peptide has previously been shown to enhance phenylephrine contraction of aortic rings in vitro. We have employed a novel observation, that A beta peptides enhance endothelin-1 (ET-1) contraction, to examine the relationship between vasoactivity and potential amyloidogenicity of A beta peptides, the role played by free radicals and calcium in the vasoactive mechanism, and the requirement of an intact endothelial layer for enhancement of vasoactivity. Rings of rat aortae were constricted with ET-1 before and after addition of amyloid peptide and/or other compounds, and a comparison was made between post- and pre-treatment contractions. In this system, vessel constriction is consistently dramatically enhanced by A beta 1-40, is enhanced less so by A beta 1-42, and is not enhanced by A beta 25-35. The endothelium is not required for A beta vasoactivity, and **calcium channel** blockers have a greater effect than antioxidants in blocking enhancement of vasoconstriction by A beta peptides. In contrast to A beta-induced cytotoxicity, A beta-induced vasoactivity is immediate, occurs in response to low doses of freshly solubilized peptide, and appears to be inversely related to the amyloidogenic potential of the A beta peptides. We conclude that the mechanism of A beta vasoactivity is distinct from that of A beta cytotoxicity. Although free radicals appear to modulate the vasoactive effects, the lack of requirement for endothelium suggests that loss of the free radical balance (between NO and O2-) may be a secondary influence on A beta enhancement of vasoconstriction. These effects of A beta on isolated vessels, and reported effects of A beta in cells of the vasculature, suggest that A beta-induced disruption of vascular tone may be a factor in the pathogenesis of cerebral amyloid **angiopathy** and Alzheimer's disease. Although the mechanism of enhanced vasoconstriction is unknown, it is reasonable to propose that in vivo contact of A beta peptides with small cerebral vessels may increase their tendency to constrict and oppose their tendency to relax. The subclinical ischemia resulting from this would be expected to up-regulate beta APP production in and around the vasculature with further increase in A beta formation and deposition. The disruptive and degenerative effects of such a cycle would lead to the complete destruction of cerebral vessels and consequently neuronal degeneration in the affected areas.

L10 ANSWER 2 OF 7 MEDLINE on STN
AN 95305286 MEDLINE
DN PubMed ID: 7785750
TI [Cerebral vasospasm following aneurysmal subarachnoid hemorrhage. Therapeutic value of treatment with calcium antagonists, hypervolemic hemodilution and induced arterial hypertension].
Zerebraler Vasospasmus nach aneurysmatischer Subarachnoidalblutung. Therapeutischer stellenwert von Kalziumantagonisten, hypervolamischer Hamodilution und induzierter arterieller Hypertension.
AU Hansen D; Hannemann L; Specht M; Schaffartzik W
CS Klinik fur Anaesthesiologie und Operative Intensivmedizin, Klinikum Benjamin Franklin, FU, Berlin.
SO Der Anaesthesist, (1995 Apr) 44 (4) 219-29. Ref: 99
Journal code: 0370525. ISSN: 0003-2417.
CY GERMANY: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA German
FS Priority Journals
EM 199507
ED Entered STN: 19950726
Last Updated on STN: 20000303

09743393

Entered Medline: 19950718

AB Only 53%-58% of patients with a subarachnoid haemorrhage (SAB) following the rupture of a cerebral aneurysm survive without neurological damage. Morbidity and mortality are closely related to the delayed ischaemic neurological deficit due to cerebral vasospasm. The following review gives an account of pathophysiological mechanisms; the importance of treatment with calcium antagonists, hypervolaemic haemodilution, and induced arterial hypertension is discussed in light of the current literature. PATHOPHYSIOLOGY. In addition to other vasoactive substances in the blood, haemoglobin, which is released from lysed erythrocytes on the 2nd to 4th day after the haemorrhage, plays an important role in inducing vasospasm. An inflammatory **angiopathy** ensues, with complete resolution after 6-12 weeks. The cerebral blood flow (CBF) is reduced depending on the extent of vasospasm. Irreversible infarction may follow the decrease of CBF below a critical value. Severe vasospasm causes autoregulatory disturbances and reduced responsiveness of cerebral vessels to CO2. CALCIUM ANTAGONISTS. The calcium blocker nimodipine causes dilatation of small pial vessels with increased CBF. However, systemic vasodilation with the subsequent fall in blood pressure may limit the increase in CBF. Furthermore, it is known that nimodipine decreases intracellular calcium concentrations resulting in some protection against ischaemic cellular injury. Seven placebo-controlled clinical studies have shown that nimodipine improves the outcome of patients with severe neurological damage due to cerebral vasospasm. HYPERVOLAEMIC HAEMODILUTION. Volume expansion and haemodilution to a hematocrit of 30%-33% is suggested to improve cerebral perfusion during vasospasm. The central venous and pulmonary capillary wedge pressures should be 10-12 mm Hg and 15-18 mm Hg, respectively. But there is no evidence of improved outcome with this measure, and pulmonary edema is a frequent side effect. However, impairment of cerebral perfusion and increased neurological damage can be demonstrated with hypovolaemia and haemoconcentration. INDUCED ARTERIAL HYPERTENSION. In the presence of cerebral vasospasm and resulting autoregulatory disturbances, cerebral perfusion can be increased by raising systemic arterial pressure. This measure, too, fails to improve neurological outcome. CONCLUSION. Treatment of cerebral vasospasm following a SAB aims to avoid any impairment of cerebral perfusion. Hypovolaemia and haemoconcentration have to be corrected. Normoventilation should be established to avoid hypocapnic vasoconstriction. Nimodipine should be administered continuously after a SAB. In view of the autoregulatory disturbances, systemic hypotension with its danger of decreased CBF must be prevented. The importance of hypervolaemic haemodilution and/or induced arterial hypertension is not clear. Despite therapeutic efforts, the number of patients who have survived a SAB without a substantial neurological deficit has not increased.

L10 ANSWER 3 OF 7 MEDLINE on STN
AN 94009790 MEDLINE
DN PubMed ID: 8405542
TI [Effect of calcium antagonists on the hemodynamic and pancreatic secretory parameters in diabetes mellitus].
Vliianie antagonistov kaltsiia na pokazateli gemodinamiki i sekretornuiu aktivnost podzheludochnoi zhelezy pri sakharnom diabete.
AU Zubkova S T; Kostiuk E P; Bulat O V
SO Fiziologicheskii zhurnal, (1993 Mar-Jun) 39 (2-3) 29-34.
Journal code: 7806822. ISSN: 0201-8489.
CY RUSSIA: Russian Federation
DT Journal; Article; (JOURNAL ARTICLE)
LA Russian
FS Priority Journals
EM 199311
ED Entered STN: 19940117
Last Updated on STN: 19940117
Entered Medline: 19931124

AB Data are presented concerning the basal levels of parathormone and calcitonin and the effect of dihydropyridine derivatives on the characteristics of haemodynamics as well as pancreatic secretory activity in patients with diabetes mellitus. It is shown that in diabetic patients with hypertension a single administration of the drugs induces vasodilatation which causes lowering of systolic and diastolic blood pressure. In patients with diabetes mellitus in combination with hypertension, heart coronary disease and obvious peripheral **angiopathy** (similar procedure) no peripheral vasodilatation was observed. No negative effects were observed on the compensatory processes (and obviously on pancreatic secretory activity in patients with both insulin-dependent and insulin-independent diabetes mellitus even during long-lasting administration of drugs. A conclusion is made that **calcium channel** antagonists should be recommended to

patients with diabetes mellitus taking into account the state of their peripheral vessels.

L10 ANSWER 4 OF 7 MEDLINE on STN
AN 91219364 MEDLINE
DN PubMed ID: 1673785
TI [Treatment of arterial hypertension in insulin-treated diabetic patients. Change over 3 years (1985-1988)].
Traitement de l'hypertension arterielle chez des diabetiques traites par insuline. Evolution sur 3 ans (1985-1988).
AU Billault B; Boisvieux J F; Thote A; Passa P
CS Service de diabetologie, Hopital Saint-Louis, Paris.
SO Presse medicale (Paris, France : 1983), (1991 Mar 16) 20 (10) 453-7.
Journal code: 8302490. ISSN: 0755-4982.
CY France
DT Journal; Article; (JOURNAL ARTICLE)
LA French
FS Priority Journals
EM 199106
ED Entered STN: 19910623
Last Updated on STN: 19950206
Entered Medline: 19910605
AB In 1985, an assessment of arterial hypertension treatment in insulin-treated diabetic patient gave disappointing results. In 1988, we carried out another study in order to assess the impact of new antihypertensive drugs (angiotensin converting enzyme inhibitors and calcium antagonists) on the management of arterial hypertension and to identify patients in whom strict normal blood pressure control is mandatory. Seven hundred and fifty four patients were selected. The prevalence of arterial hypertension was 38.4 p. 100 (n = 290). Two hundred and thirty five patients (31.2 p. 100) were on antihypertensive treatment: monotherapy: 60.4 p. 100 (n = 142), bitherapy: 30.6 p. 100 (n = 72), tritherapy: 9 p. 100 (n = 21). In descending order of frequency, the following drugs were used: angiotensin converting enzyme inhibitors, calcium antagonists, diuretics, cardio-selective beta-blockers, central acting agents. Blood pressure values significantly decreased (148/83 mmHg, in 1988, vs 157/85 mmHg, in 1985, p less than 0.05). However, 20 p. 100 of the patients still had blood pressure values greater than or equal to 160 and/or 95 mmHg with or without antihypertensive treatment, and on average, blood pressure values remained higher in patients with antihypertensive treatment than in those without (148/83 mmHg vs 131/77 mmHg, p less than 0.001). Patients with urinary albumin excretion above or equal 30 mg/24 h compared to those with normal albuminuria had significant higher values of blood pressure, glycosylated haemoglobin and blood lipids (p less than 0.01). Only 51 p. 100 of these patients, received an antihypertensive treatment. This study emphasizes the difficulty of antihypertensive treatment in insulin-treated diabetic patients and the necessity to improve education in patients with high risk for widespread **angiopathy**, and particularly those with increased urinary albumin excretion.

L10 ANSWER 5 OF 7 MEDLINE on STN
AN 91075879 MEDLINE
DN PubMed ID: 2175081
TI [Pathogenetic therapy of hemorrhagic strokes].
Patogeneticheskaia terapiia gemorragicheskikh insul'tov.
AU Gabashvili V M; Skakarishvili R R; Dzhanelidze M T; Dzhandzhgava T V; Maruashvili M G
SO Zhurnal nevropatologii i psikhiatrii imeni S.S. Korsakova (Moscow, Russia : 1952), (1990) 90 (7) 19-21.
Journal code: 8710066. ISSN: 0044-4588.
CY USSR
DT Journal; Article; (JOURNAL ARTICLE)
LA Russian
FS Priority Journals
EM 199101
ED Entered STN: 19910308
Last Updated on STN: 19910308
Entered Medline: 19910118
AB The authors provide grounds for the principles of pathogenic therapy aimed at posthemorrhagic cerebral vasospasm, proliferation-necrotic **angiopathy** with ensuing cerebral damage wherein free radical oxidation and antifibrinolytic therapy are of major importance. The efficiency of combined pathogenic therapy comprising antioxidants, chelators, cyclooxygenase inhibitors, calcium antagonists, barbiturate protectors, membrane-stabilizing and limiting antifibrinolytic hemostatic drugs is evaluated.

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L10 ANSWER 6 OF 7 MEDLINE on STN
AN 89250206 MEDLINE
DN PubMed ID: 2524309
TI [Therapy of trophic ulcers in diabetes mellitus].
Terapia delle ulcere trofiche in corso di diabete mellito.
AU Cavagnaro A; Capucci F; Cortassa G; Del Nero E; Granata L; Noberasco G
SO La Clinica terapeutica, (1989 Feb 15) 128 (3) 177-82.
Journal code: 0372604. ISSN: 0009-9074.
CY Italy
DT Journal; Article; (JOURNAL ARTICLE)
LA Italian
FS Priority Journals
EM 198907
ED Entered STN: 19900306
Last Updated on STN: 19900306
Entered Medline: 19890705
AB Trophic lesions of the lower limbs are very frequent in diabetic patients, especially after long periods of poor glycemic control. These lesions are caused by some diabetic sequelae, namely neuropathy and **angiopathy** . The human and social cost of trophic lesions is very high; for this reason education of diabetics who are likely to develop such lesions is extremely important. When trophic lesions have developed, conservative management is based on local and general therapy. Amputation is taken into account only when conservative management has failed.

L10 ANSWER 7 OF 7 MEDLINE on STN
AN 88196582 MEDLINE
DN PubMed ID: 3329128
TI [New antihypertensive therapy in diabetics].
Les nouveaux traitements antihypertenseurs chez les diabetiques.
AU Passa P; Marre M; Leblanc H; Billault B
CS Service d'Endocrinologie-Diabetologie, Hopital Saint-Louis, Paris.
SO Diabete & metabolisme, (1987 Nov-Dec) 13 (6) 643-50. Ref: 54
Journal code: 7604157. ISSN: 0338-1684.
CY France
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA French
FS Priority Journals
EM 198806
ED Entered STN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19880609
AB According to the W.H.O. criteria (160/95 mmHg), arterial hypertension is present in about one third of diabetic patients. But the W.H.O. criteria are not appropriate in insulin-dependent diabetics. There is increasing evidence that a slight increase of blood pressure values may have a deleterious effect on various localizations of diabetic **angiopathy** . Arterial blood pressure is a major predictive factor for stroke or death due to coronary heart disease. The incidence and prevalence of diabetic retinopathy are significantly correlated with systolic and/or diastolic blood pressure values. In patients with incipient diabetic nephropathy, a slight elevation of blood pressure values is usually observed, an antihypertensive treatment may reduce albumin excretion rate and may prevent clinical diabetic nephropathy. Antihypertensive treatment is the more effective and the best tolerated of all interventions dedicated to reduce albumin excretion. Calcium antagonists and angiotensin converting enzyme inhibitors are at the present time the drugs to be used in the treatment of hypertensive diabetic patients as they are more effective and better tolerated than the usual antihypertensive agents. A part from their antihypertensive effect, they also improve cardiac, cerebral and intra-renal haemodynamics.

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=> d l8 1-3 bib abs

L8 ANSWER 1 OF 3 MEDLINE on STN
AN 1999022521 MEDLINE
DN PubMed ID: 9805679
TI Long-term administration study of propiverine hydrochloride (BUP-4 tablets) in **pollakiuria** and urinary incontinence.
AU Noguchi K; Masuda M; Noguchi S; Kubota Y; Hosaka M; Senga Y; Sano K; Miyai K; Kanno H; Kitami K; Fujinami K; Miura T; Kondo I; Kawasaki C; Moriyama M; Hara Y; Ida T; Fukuoka H; Nakagawa J; Kitajima N; Fukuda M; Satomi Y; Takahashi T; Yamaguchi T; Shiozaki H; +
CS Department of Urology, Yokohama City University School of Medicine.
SO Hinyokika kiyo. Acta urologica Japonica, (1998 Sep) 44 (9) 687-93.
Journal code: 0421145. ISSN: 0018-1994.
CY Japan
DT (CLINICAL TRIAL)
Journal; Article; (JOURNAL ARTICLE)
(MULTICENTER STUDY)
LA Japanese
FS Priority Journals
EM 199902
ED Entered STN: 19990301
Last Updated on STN: 19990301
Entered Medline: 19990212
AB The safety and efficacy of one-year administration of propiverine hydrochloride (BUP-4 tablets) were assessed in facilities affiliated with the Department of Urology of Yokohama City University School of Medicine. Changes in subjective symptoms showed significant improvement in mean frequency of urination in the daytime from 10.3 +/- 4.0 times before administration to 7.1 +/- 2.9 times 1 year after the start of administration, in mean frequency of voiding at night from 4.2 +/- 1.7 times to 2.1 +/- 1.1 times and in mean incidence of urinary incontinence from 2.9 +/- 2.1 times to 0.7 +/- 1.0 times. The final degree of overall improvement rate was 82.0% (41/50 cases). Adverse effects were observed 26 times in 22 patients, the incidence being 15.6% (22/141 cases). They consisted of digestive symptoms in 9.9% (6 events of dry mouth, 4 of constipation, 2 of abdominal discomfort, 2 of diarrhea and 1 of gastritis), urinary tract symptoms in 3.5% (4 of dysuria and 1 of residual urine), abnormal laboratory findings in 1.4% (increase in glutamic-oxaloacetic transaminase, glutamic-pyruvic transaminase or lactate dehydrogenase levels) and others (1.4%). These results provide further evidence of the safety and efficacy of propiverine hydrochloride (BUP-4 tablets) even when administered for a long-term in the treatment of patients with **pollakiuria** and urinary incontinence.

L8 ANSWER 2 OF 3 MEDLINE on STN
AN 97234414 MEDLINE
DN PubMed ID: 9079239
TI Effect of the anticholinergic drug with calcium antagonistic activity, (+/-)-4-diethylamino-1,1-dimethylbut-2-yn-1-yl 2-cyclohexyl-2-hydroxy-2-phenylacetate monohydrochloride monohydrate, on lower urinary tract function in rhesus monkeys.
AU Kimura Y; Hamada K; Fukui H; Ogasawara T; Ukai Y; Yoshikuni Y; Kimura K
CS Research Laboratories, Nippon Shinyaku Co., Ltd., Kyoto, Japan.
SO Arzneimittel-Forschung, (1997 Feb) 47 (2) 189-94.
Journal code: 0372660. ISSN: 0004-4172.
CY GERMANY: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199705
ED Entered STN: 19970507
Last Updated on STN: 19980206
Entered Medline: 19970501
AB NS-21 ((+/-)-4-diethylamino-1,1-dimethylbut-2-yn-1-yl 2-cyclohexyl-2-hydroxy-2-phenylacetate monohydrochloride monohydrate, CAS 129927-33-4) and its active metabolite, RCC-36 ((+/-)-4-ethylamino-1,1-dimethylbut-2-yn-1-yl 2-cyclohexyl-2-hydroxy-2-phenylacetate monohydrochloride), have both anticholinergic and calcium antagonistic activities. NS-21 is under development for the treatment of bladder dysfunction. This study was designed to compare the effects of NS-21 and RCC-36 on the bladder function of monkeys with the effects of various reference drugs. Male rhesus monkeys were anesthetized with a mixture of enflurane and nitrous oxide, a transurethral catheter was inserted into the urinary bladder from the external urethral orifice, and cystometrograms were recorded. Drugs were administered intravenously. NS-21 at doses of 0.3 and 1 mg/kg caused an increase in bladder capacity without affecting the micturition pressure. RCC-36 also caused an increase in bladder capacity, but it was

accompanied by a significant decrease in micturition pressure. Oxybutynin, atropine and verapamil all caused decreases in micturition pressure at doses which caused an increase in bladder capacity. Of the drugs examined, only NS-21 caused an increase in the bladder capacity of rhesus monkeys without affecting the micturition pressure. This drug is therefore a promising candidate for the clinical treatment of **pollakiuria** and urinary incontinence.

L8 ANSWER 3 OF 3 MEDLINE on STN
AN 97234413 MEDLINE
DN PubMed ID: 9079238
TI Effect of the anticholinergic drug with calcium antagonistic activity, (+/-)-4-diethylamino-1,1-dimethylbut-2-yn-1-yl 2-cyclohexyl-2-hydroxy-2-phenylacetate monohydrochloride monohydrate, on lower urinary tract function in decerebrated dogs.
CM Erratum in: Arzneimittelforschung 1997 Apr;47(4):420
AU Kimura Y; Fukui H; Hamada K; Ogasawara T; Yamazaki C; Ukai Y; Yoshikuni Y; Kimura K
CS Research Laboratories, Nippon Shinyaku Co., Ltd., Kyoto, Japan.
SO Arzneimittel-Forschung, (1997 Feb) 47 (2) 182-9.
Journal code: 0372660. ISSN: 0004-4172.
CY GERMANY: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 199705
ED Entered STN: 19970507
Last Updated on STN: 19980206
Entered Medline: 19970501
AB NS-21 ((+/-)-4-diethylamino-1,1-dimethylbut-2-yn-1-yl 2-cyclohexyl-2-hydroxy-2-phenylacetate monohydrochloride monohydrate, CAS 129927-33-4) is a novel compound designed for the treatment of bladder dysfunction. The effects of NS-21 and its active metabolite, RCC-36 ((+/-)-4-ethylamino-1,1-dimethylbut-2-yn-1-yl 2-cyclohexyl-2-hydroxy-2-phenylacetate monohydrochloride), on the urodynamics of decerebrated dogs are reported. Dogs were decerebrated at the precollicular-postmamillary level and the urodynamic effects of intravenously administered NS-21, RCC-36, and various reference drugs were compared by cystometry. NS-21 (0.3-1 mg/kg) and RCC-36 (0.1 mg/kg) caused an increase in bladder capacity without affecting the micturition pressure or residual volume, and thus caused a significant increase in functional bladder capacity. Oxybutynin caused a dose-dependent increase in bladder capacity at 0.1 mg/ kg and higher doses; however, the associated decrease in micturition pressure resulted in a significant increase in residual volume and a decrease in functional bladder capacity. These effects of oxybutynin were similar to those of atropine. Propiverine (0.1-10 mg/kg) and terodiline (0.1-10 mg/kg) caused no significant increase in bladder capacity. In conclusion, in decerebrated dogs, NS-21 and RCC-36 increased the bladder capacity without increasing the residual volume. NS-21 thus had more favorable therapeutic effects than any of the reference drugs tested and is therefore a promising candidate drug for the treatment of **pollakiuria** and urinary incontinence.

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L17 ANSWER 1 OF 8 MEDLINE on STN
AN 2000201405 MEDLINE
DN PubMed ID: 10738848
TI Are vascular factors involved in Alzheimer's disease? Facts and theories.
AU Di Iorio A; Zito M; Lupinetti M; Abate G
CS Department of Medicine and Aging, G. D'Annunzio University, Chieti, Italy.
SO Aging (Milan, Italy), (1999 Dec) 11 (6) 345-52. Ref: 85
Journal code: 9102503. ISSN: 0394-9532.
CY Italy
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA English
FS Priority Journals
EM 200005
ED Entered STN: 20000518
Last Updated on STN: 20000518
Entered Medline: 20000509
AB The hypothesis that vascular factors may contribute to the development of Alzheimer's disease (AD) is supported by epidemiologic and pathologic observations. Arterial hypertension and diabetes have been found to be associated not only with vascular dementia, but also with AD; in addition, the treatment of hypertension with **calcium antagonists** seems to prevent degenerative dementias. Hypertension and hyperinsulinemia favor the deposition of amyloid substance in the brain. The histopathology of AD is marked not only by neurofibrillary tangles and senile plaques, but also by macro and micro congophilic **angiopathy** and ischemic white matter rarefaction. The specific AD pathological lesions, if isolated, are not able to lead to an evident clinical picture of dementia, which, on the contrary, becomes evident when vascular, mainly subcortical, lesions are associated. These and other observations suggest that vascular factors may have a role in the development of AD. An aggressive approach to these factors could be of value in the prevention of AD.
AB . . . found to be associated not only with vascular dementia, but also with AD; in addition, the treatment of hypertension with **calcium antagonists** seems to prevent degenerative dementias. Hypertension and hyperinsulinemia favor the deposition of amyloid substance in the brain. The histopathology of AD is marked not only by neurofibrillary tangles and senile plaques, but also by macro and micro congophilic **angiopathy** and ischemic white matter rarefaction. The specific AD pathological lesions, if isolated, are not able to lead to an evident. .
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L17 ANSWER 2 OF 8 MEDLINE on STN
AN 95305286 MEDLINE
DN PubMed ID: 7785750
TI [Cerebral vasospasm following aneurysmal subarachnoid hemorrhage. Therapeutic value of treatment with **calcium antagonists**, hypervolemic hemodilution and induced arterial hypertension]. Zerebraler Vasospasmus nach aneurysmatischer Subarachnoidalblutung. Therapeutischer stellenwert von Kalziumantagonisten, hypervolamischer Hamodilution und induzierter arterieller Hypertension.
AU Hansen D; Hannemann L; Specht M; Schaffartzik W
CS Klinik fur Anaesthesiologie und Operative Intensivmedizin, Klinikum Benjamin Franklin, FU, Berlin.
SO Der Anaesthesist, (1995 Apr) 44 (4) 219-29. Ref: 99
Journal code: 0370525. ISSN: 0003-2417.
CY GERMANY: Germany, Federal Republic of
DT Journal; Article; (JOURNAL ARTICLE)
General Review; (REVIEW)
(REVIEW, TUTORIAL)
LA German
FS Priority Journals
EM 199507
ED Entered STN: 19950726
Last Updated on STN: 20000303
Entered Medline: 19950718
AB Only 53%-58% of patients with a subarachnoid haemorrhage (SAB) following the rupture of a cerebral aneurysm survive without neurological damage. Morbidity and mortality are closely related to the delayed ischaemic neurological deficit due to cerebral vasospasm. The following review gives an account of pathophysiological mechanisms; the importance of treatment with **calcium antagonists**, hypervolaemic haemodilution, and induced arterial hypertension is discussed in light of the current literature. PATHOPHYSIOLOGY. In addition to other vasoactive

substances in the blood, haemoglobin, which is released from lysed erythrocytes on the 2nd to 4th day after the haemorrhage, plays an important role in inducing vasospasm. An inflammatory **angiopathy** ensues, with complete resolution after 6-12 weeks. The cerebral blood flow (CBF) is reduced depending on the extent of vasospasm. Irreversible infarction may follow the decrease of CBF below a critical value. Severe vasospasm causes autoregulatory disturbances and reduced responsiveness of cerebral vessels to CO2. **CALCIUM ANTAGONISTS.** The calcium blocker nimodipine causes dilatation of small pial vessels with increased CBF. However, systemic vasodilation with the subsequent fall in blood pressure may limit the increase in CBF. Furthermore, it is known that nimodipine decreases intracellular calcium concentrations resulting in some protection against ischaemic cellular injury. Seven placebo-controlled clinical studies have shown that nimodipine improves the outcome of patients with severe neurological damage due to cerebral vasospasm. HYPERVOLAEMIC HAEMODILUTION. Volume expansion and haemodilution to a hematocrit of 30%-33% is suggested to improve cerebral perfusion during vasospasm. The central venous and pulmonary capillary wedge pressures should be 10-12 mm Hg and 15-18 mm Hg, respectively. But there is no evidence of improved outcome with this measure, and pulmonary edema is a frequent side effect. However, impairment of cerebral perfusion and increased neurological damage can be demonstrated with hypovolaemia and haemoconcentration. INDUCED ARTERIAL HYPERTENSION. In the presence of cerebral vasospasm and resulting autoregulatory disturbances, cerebral perfusion can be increased by raising systemic arterial pressure. This measure, too, fails to improve neurological outcome. CONCLUSION. Treatment of cerebral vasospasm following a SAB aims to avoid any impairment of cerebral perfusion. Hypovolaemia and haemoconcentration have to be corrected. Normoventilation should be established to avoid hypocapnic vasoconstriction. Nimodipine should be administered continuously after a SAB. In view of the autoregulatory disturbances, systemic hypotension with its danger of decreased CBF must be prevented. The importance of hypervolaemic haemodilution and/or induced arterial hypertension is not clear. Despite therapeutic efforts, the number of patients who have survived a SAB without a substantial neurological deficit has not increased.

TI [Cerebral vasospasm following aneurysmal subarachnoid hemorrhage. Therapeutic value of treatment with **calcium antagonists**, hypervolemic hemodilution and induced arterial hypertension]. Zerebraler Vasospasmus nach aneurysmatischer Subarachnoidalblutung. Therapeutischer stellenwert von Kalziumantagonisten, hypervolamischer Hamodilution und induzierter arterieller. . .

AB . . . neurological deficit due to cerebral vasospasm. The following review gives an account of pathophysiological mechanisms; the importance of treatment with **calcium antagonists**, hypervolaemic haemodilution, and induced arterial hypertension is discussed in light of the current literature. PATHOPHYSIOLOGY. In addition to other vasoactive. . . lysed erythrocytes on the 2nd to 4th day after the haemorrhage, plays an important role in inducing vasospasm. An inflammatory **angiopathy** ensues, with complete resolution after 6-12 weeks. The cerebral blood flow (CBF) is reduced depending on the extent of vasospasm.. . . decrease of CBF below a critical value. Severe vasospasm causes autoregulatory disturbances and reduced responsiveness of cerebral vessels to CO2. **CALCIUM ANTAGONISTS.** The calcium blocker nimodipine causes dilatation of small pial vessels with increased CBF. However, systemic vasodilation with the subsequent fall. . .

L17 ANSWER 3 OF 8 MEDLINE on STN
AN 94265952 MEDLINE
DN PubMed ID: 8206192
TI [Cost of the treatments of arterial hypertension associated with diabetes].
Le cout du traitement de l'hypertension arterielle associee au diabete.
AU Passa P; Giraud S
CS Service d'Endocrinologie-Diabetologie, Hopital Saint-Louis, Paris, France.
SO Diabete & metabolisme, (1993 Dec) 19 (5 Suppl) 523-7.
Journal code: 7604157. ISSN: 0338-1684.
CY France
DT Journal; Article; (JOURNAL ARTICLE)
LA French
FS Priority Journals
EM 199407
ED Entered STN: 19940721
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Entered Medline: 19940714
AB In insulin-dependent and non insulin-dependent diabetic patients, the treatment of a modest increase in blood pressure values has been proved

effective in reducing the incidence and in improving the evolution of various locations of diabetic **angiopathy.** This beneficial effect is associated with a cost which can be evaluated by the analysis of IMS and DOREMA data. In France, the evolution of the sales of antihypertensive agents in diabetic patients increased from 117 MF in 1980 to 784 MF in 1991. This dramatic increase is mainly related to the prescription of new antihypertensive agents: **calcium antagonists** and ACE inhibitors. From 1980 to 1991, the evolution of antihypertensive agent's sales was more important in diabetic patients than in the general population. In 1991, the total cost of antidiabetic treatment: insulin, antidiabetic oral agents and strips for capillary blood glucose monitoring was about 1,100 MF, quite similar to the cost of antihypertensive and hypolipidemic agents used in the same patients.

AB . . . pressure values has been proved effective in reducing the incidence and in improving the evolution of various locations of diabetic **angiopathy.** This beneficial effect is associated with a cost which can be evaluated by the analysis of IMS and DOREMA data.. . . in 1980 to 784 MF in 1991. This dramatic increase is mainly related to the prescription of new antihypertensive agents: **calcium antagonists** and ACE inhibitors. From 1980 to 1991, the evolution of antihypertensive agent's sales was more important in diabetic patients than. . .

L17 ANSWER 4 OF 8 MEDLINE on STN
AN 94009790 MEDLINE
DN PubMed ID: 8405542
TI [Effect of **calcium antagonists** on the hemodynamic and pancreatic secretory parameters in diabetes mellitus]. Vliianie antagonistov kaltsiia na pokazateli gemodinamiki i sekretornuiu aktivnost podzheludochnoi zhelezy pri sakharnom diabete.
AU Zubkova S T; Kostiuk E P; Bulat O V
SO Fiziologicheskii zhurnal, (1993 Mar-Jun) 39 (2-3) 29-34. Journal code: 7806822. ISSN: 0201-8489.
CY RUSSIA: Russian Federation
DT Journal; Article; (JOURNAL ARTICLE)
LA Russian
FS Priority Journals
EM 199311
ED Entered STN: 19940117
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Entered Medline: 19931124
AB Data are presented concerning the basal levels of parathormone and calcitonin and the effect of dihydropyridine derivatives on the characteristics of haemodynamics as well as pancreatic secretory activity in patients with diabetes mellitus. It is shown that in diabetic patients with hypertension a single administration of the drugs induces vasodilatation which causes lowering of systolic and diastolic blood pressure. In patients with diabetes mellitus in combination with hypertension, heart coronary disease and obvious peripheral **angiopathy** (similar procedure) no peripheral vasodilatation was observed. No negative effects were observed on the compensatory processes (and obviously on pancreatic secretory activity in patients with both insulin-dependent and insulin-independent diabetes mellitus even during long-lasting administration of drugs. A conclusion is made that calcium channel antagonists should be recommended to patients with diabetes mellitus taking into account the state of their peripheral vessels.
TI [Effect of **calcium antagonists** on the hemodynamic and pancreatic secretory parameters in diabetes mellitus]. Vliianie antagonistov kaltsiia na pokazateli gemodinamiki i sekretornuiu aktivnost podzheludochnoi. . .
AB . . . systolic and diastolic blood pressure. In patients with diabetes mellitus in combination with hypertension, heart coronary disease and obvious peripheral **angiopathy** (similar procedure) no peripheral vasodilatation was observed. No negative effects were observed on the compensatory processes (and obviously on pancreatic. . .